

Original Code Sequence

```
ld      r1, y
add     r5 < r1, 4
shl     r5, 1
or      r6 < r1, r5
```

Modified Code Sequence

```
ldpv    r1, y
add     r5 < r1, 4
shl     r5, 1
or      r6 < r1, r5
.
.
chkpv   r1, y, REPAIR
.
.
```

REPAIR:

```
ld      r1, y
add     r5 < r1, 4
shl     r5, 1
or      r6 < r1, r5
ret
```

FIG. 1

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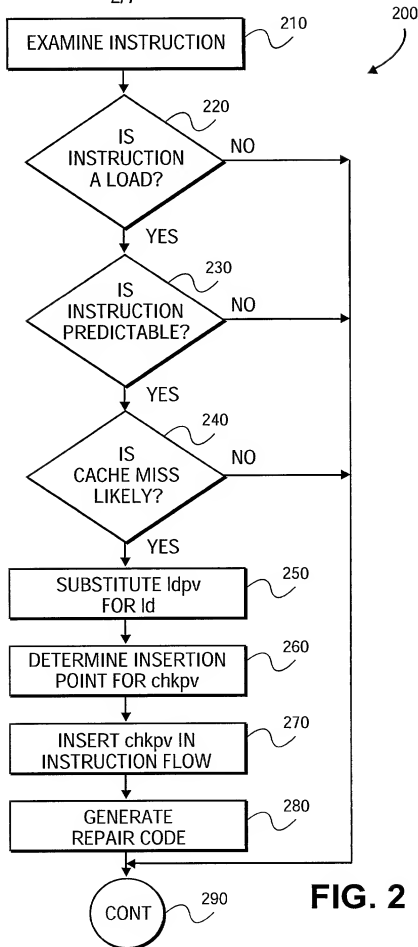


FIG. 2

300



ID	ADDRESS	VALIDITY	REGISTER NO.	SIZE	PREDICTED VALUE	ACTUAL VALUE	AW

FIG. 3

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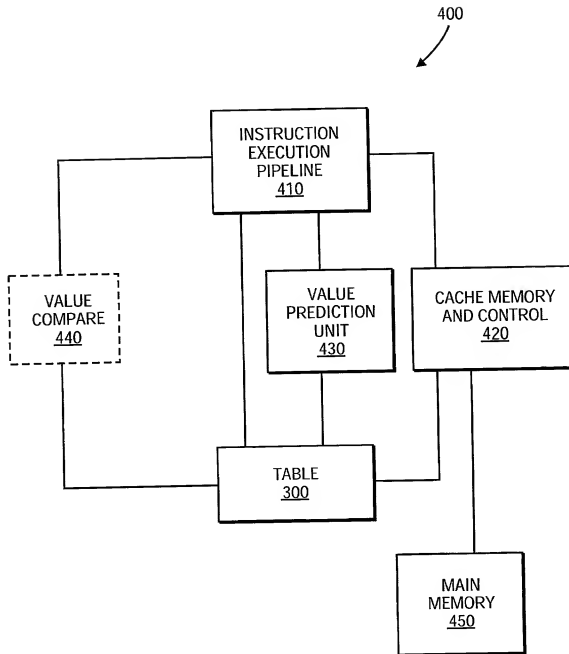


FIG. 4

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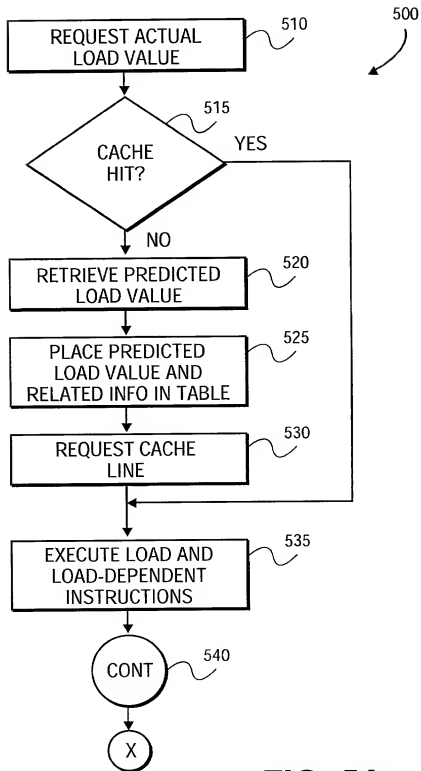


FIG. 5A

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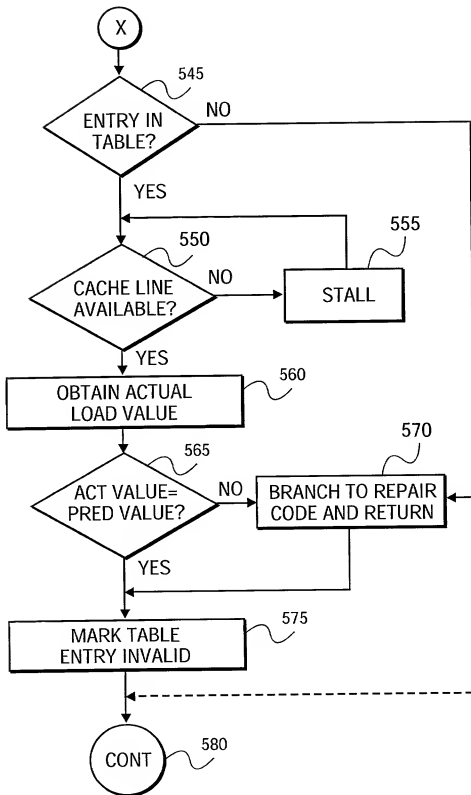


FIG. 5B

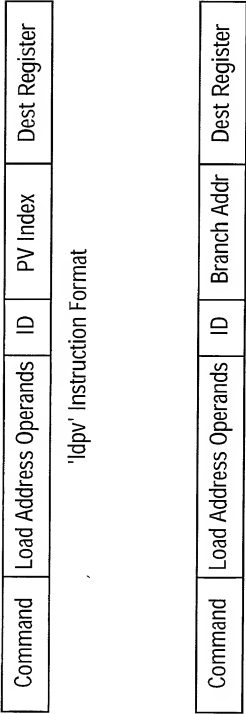


FIG. 6